

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Brian K. Short" <ke7gh@primenet.com>  
Subject: [18814] \*\* Stuff FS/WTB \*\*  
Message-ID: <336A08D8.2469@primenet.com>

\*\*\* For Sale \*\*\* Stuff

-Tigertronics BP-1 Baycom packet in box/manual etc \$35  
-qty 1 Mirage brick amp remote control box w/cables \$20ea  
-New Media PCMCIA SCSI Bus Toaster Interface \$45  
-FAS-1-4R Yaesu 4-way automatic antenna relay in box \$65  
-PK-88 TNC, manual, etc \$85  
-DVS-2 Yaesu Voice Keyer \$200 Brian ke7gh@primenet.com

FS: \*\* Hal P38 Clover, Pactor, AMTOR, RTTY \*\*  
Hal P38 Clover, Pactor, AMTOR, RTTY \*\* \$250 obo

WTB: \*\* SCS PTC-II \*\*  
Looking for an SCS PTC-II.

RTTY TU Collector! \*WTB\*  
Collector of older RTTY terminal units looking for more to add  
to collection, including:  
1) IRL FSK-1000  
2) Dovetron  
3) Hal ST-5, ST-6, ST-5000  
4) other commercial or homebrew RTTY equipment

Brian ke7gh@primenet.com

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Joel Malman <malman@BBN.COM>  
Subject: [18781] 50/40/30 QSO List for WA1QVM  
Message-ID: <199705020336.XAA157206@nss2.CC.Lehigh.EDU>

Group,

Here is my QSO list for the 50/40/30 -MA- tonight (Thurs, USA time).

Date	Time	Band	Call	Name	State	PWR
5/1/97	2307	30M	W9KI	AL	AR	5W
	2310	30M	W8BD	BILL	OH	5W
	2313	30M	K9HD	JOYCE	IN	5W
	2317	30M	K5ID	KEN	AR	5W
	2322	30M	K9DP	DAN	IND	75W QRO
	2339	30M	W8IZZ	DON	OHIO	2W

2346	30M	WR4I	DAN	VA	5W
2354	30M	WD4MSM	BARRY	IND	?
5/2/97 0013	30M	NF0R	DAVE	MO	5W
0016	30M	N4ROA	DAN	VA	5W
0020	30M	KE4IZH	RICK	VA	2W
0041	30M	N7VE	DAN	AZ	1W
0056	30M	AB5UA	CLIF	OK	5W
0136	40M	WN9U	GARY	WISC	4W
0230	40M	WB4EXW	WATSON	NC	5W
0247	40M	W4BW	AP	FLA	70W QRO

Well that was it for 50/40/30 from Ma tonight. 30 meters was pretty nice and quiet, 40 meters was the pits. To make things worse, the N.E. area was covered with thunderstorms that came in from W8 land (thanks) -- it made QRN very bad.

If there are typo's here, please let me know... Thanks to all stations that listened for me and sorry to all the stations that called and I could not hear.

72 to all.

/joel wa1qvm (malman@bbn.com ... Concord, Ma.)  
WIMPS: Qs=055 30m=051 17m=04 12m=00 States=13/02/00 DX=024/02/00

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: K4AHK@ix.netcom.com  
Subject: [18771] 9V Battery Life  
Message-ID: <336931EA.709F@ix.netcom.com>

WOW ! Ten responses to my question about 9V Batteries. Thanks guys.

Bill - K4AHK

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Kr0i1@aol.com  
Subject: [18775] Balanced lines using coax cable  
Message-ID: <970501210753\_-1198940793@emout19.mail.aol.com>

The 1991 ARRL Antenna book seems to disagree with some of the comments made here over the last few days regarding shielded balanced transmission lines constructed from small-size coax cable. I would be very interested in hearing from someone who has

actually built such a feed line and who has measured the performance parameters in a comparison test with a coax feed line and a open-wire feedline.

72/73 de Mac, KR0I

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Steven Karty" <kartys@ncr.disa.mil>  
Subject: [18810] batteries  
Message-ID: <9704028625.AA862593672@ncr.disa.mil>

Someone posted the following recently, and I think that there's something wrong with it:

```
sr> From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu> 09oct96...
sr>
sr>           Ray-O-Vac      Eveready      Duracell      NiCds
sr> Size      Alkaline      Max      Renewal      Energizer      (GOOD ones)
sr> AAA        750          500       1100         1120          270
sr> AA         2000         1000       2450         2450          600
sr> C           5000         3100       7200         7100         2200
sr> D          10000         5000       8900         14250         4400
sr>
```

Isn't it Ray-O-Vac that makes the Renewal? Maybe some of the columns got mixed up and, if so, that makes the entire chart suspect.

72, Steven - N5SK

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: k4wz@juno.com (RON L TODD)  
Subject: [18809] BATTERY  
Message-ID: <19970502.090158.10143.20.k4wz@juno.com>

I have a Index Lab QRP+ and Companion.  
What is the best way to take care of the battery when not in use??  
Can I leave it on charge all the time ?  
Battery is a standard Gel cell, Charger is 240 Ma  
Thanks for any HELP  
Ron

RON TODD K4WZ ex AE4LQ, KE4RZR, WA4EPC  
K4WZ@JUNO.COM QRP-L #924 FISTS # 2109

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Russ Carpenter <russ@natworld.com>  
Subject: [18777] Confessions of a Terrain Junkie  
Message-ID: <199705020144.VAA134252@nss2.CC.Lehigh.EDU>

In the aftermath of the QRPTTF, several members of the QRP-L were kind enough to praise the signals from my in-the-field operation (in spite of the general slothfulness and ineptitude of the operator). This seems like a good time to share some insights. It turns out that locating an antenna in just the right terrain can have a remarkable impact on signal strength.

I first got interested in this subject about four years ago, after reading Les Moxon's inscrutable but intriguing book "HF Antennas for all Locations." Chapter 10, entitled "The Antenna and Its Environment," fired my imagination. Sloping terrain can produce surprising gain at low angles of radiation. According to Moxon, with ideal terrain (a steep slope, at least 1,000 feet high, terminating in a plain or ocean) there can be 6dB of gain from the foreground reflection and another 6dB of gain from the distant reflection.

After reading Moxon's book, I trooped all over Oregon looking for the perfect mountain. The best part of this quest was that it was an excellent excuse to take some great hikes to obscure mountaintops, many of which had been lookout sites in the old days. My search, however, was based largely on theory.

Two things have since happened that have convinced me that Moxon's ideas about terrain are valid. First, Brian Beezley published software called "TA," which performs ray tracing analysis for specific antennas in actual terrain. Second, I've been getting some outstanding results from very humble antennas placed in steep terrain. By now, I've done ray tracing analyses of quite a collection of ridges and mountaintops and have tested many of them in outdoor ham events, like QRPTTF, Field Day, QRP Afield, and so on.

For me, this emphasis has transformed a fine hobby (QRP radio) into the hobby from heaven. Now, I've got the perfect excuse to stick some radio gear in a pack, hop up to the top of some steep terrain, and put out a pretty nice signal in a contest environment.

Here's some practical advice:

1. The places with ideal terrain almost never have trees in the right place (or trees at all). So it's important to develop a self supporting, portable antenna. For me, this means a multiband inverted V supported by

a lightweight mast.

2. As Moxon states, with steep terrain horizontal polarization is much better than vertical. Vertical polarization cannot take full advantage of the gain from near and far reflections. Another reason why an inverted V, placed broadside to the cliff, makes sense.

3. Living on the West Coast, I look for east-facing, convex cliffs which terminate in large, flat areas. Interestingly, the vertical radiation coming off the ends of the inverted V, and reflecting off the "flat terrain" of a ridge line, works just fine for the relatively short north and south distances needed to cover the West Coast. Meanwhile, the inverted V is radiating horizontally polarized waves into the "foreground zone" of the cliff, and producing low angle, killer signals to the east.

4. TA generates vertical radiation profiles which, in turn, can be ported into the VOA Area propagation software (using a utility program you can get from Brian). You can then plot maps of the country, or the world, showing where your peanut whistle signal will go. Thus, TA will tell you about the elevation impacts of terrain, while VOA will dramatically show you the azimuth impacts. A far cry from the days when I was wandering around looking at mountains with nothing but Moxon's words echoing in my head.

5. The tops of mountains and ridges are exposed to weather. So if the weather looks dubious, you need to take shelter that can stand up to fairly exciting conditions.

So that's it--Terrain 101. The secret to life.

Russ Carpenter, AA7QU  
McKenzie River, Oregon

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Marshall Emm" <mgemm@mtechnologies.com>  
Subject: [18819] CQC Meeting  
Message-ID: <199705021936.NAA05445@lynx.csn.net>

For those of you within reasonable driving distance, please note that the May meeting of CQC will take place tomorrow, 5/3/97, at 10:00 am in the Castlewood Library. The Library is located at Yosemite and South Uinta streets, and a map can be found on the CQC web site--  
<http://www.mtechnologies.com/mthome> then look for the CQC logo.

The meeting will feature part 2 of Yardley Beers' 70 years in ham radio, election of officers, and presentation of two Gold Star

Awards.

Hope to see you there!

73

Marshall Emm

AA0XI/VK5FN

aa0xi@mtechnologies.com

<http://www.mtechnologies.com/mthome>

<http://www.mtechnologies.com/mthome>

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997

From: "Marshall Emm" <mgemm@mtechnologies.com>

Subject: [18825] CQC Swap List

Message-ID: <199705021935.NAA05261@lynx.csn.net>

The list has been updated AGAIN, with several new listings. What happened is I got the outstanding stuff from Dick. I've also integrated his e-mail distribution list, so those of you who are on that list should get a copy before you see this.

Web surfers can browse to <http://www.mtechnologies.com/mthome> and look for the CQC logo.

73

Marshall Emm

AA0XI/VK5FN

aa0xi@mtechnologies.com

<http://www.mtechnologies.com/mthome>

<http://www.mtechnologies.com/mthome>

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997

From: Paul Erickson <paul1@wizard.ucs.sfu.ca>

Subject: [18767] Creation by Computer (delete if you don't like jokes)

Message-ID: <9705012352.AA06521@wizard.ucs.sfu.ca>

THE CREATION BY COMPUTER

In the beginning there was the computer. And God said,

>

c:\>Let there be light]

>

Enter user id.

c:\>God

Enter password.

c:\>Omniscient

Password incorrect. Try again.

c:\>Omnipotent

Password incorrect. Try again.

c:\>Technocrat

And God logged on at 12:01:00 AM, Sunday, March 1.

c:\>Let there be light]

Unrecognizable command. Try again.

c:\>Create light

Done

c:\>Run heaven and earth

And God created Day and Night. And God saw there were 0 errors.

And God logged off at 12:02:00 AM, Sunday, March 1.

And God logged on at 12:01:00 AM, Monday, March 2.

c:\>Let there be firmament in the midst of water and light

Unrecognizable command. Try again.

c:\>Create firmament

Done.

c:\>Run firmament

And God divided the waters. And God saw there were 0 errors.

And God logged off at 12:02:00 AM, Monday, March 2.

And God logged on at 12:01:00 AM, Tuesday, March 3.

```
c:\>Let the waters under heaven be gathered together unto one place and let  
the dry land appear and
```

Too many characters in specification string. Try again.

```
c:\>Create dry_land
```

Done.

```
c:\>Run firmament
```

And God divided the waters. And God saw there were 0 errors.

And God logged off at 12:02:00 AM, Tuesday, March 3.

And God logged on at 12:01:00 AM, Wednesday, March 4.

```
c:\>Create lights in the firmament to divide the day from the night
```

Unspecified type. Try again.

```
c:\>Create sun_moon_stars
```

Done

```
c:\>Run sun_moon_stars
```

And God divided the waters. And God saw there were 0 errors.

And God logged off at 12:02:00 AM, Wednesday, March 4.

And God logged on at 12:01:00 AM, Thursday, March 5.

```
c:\>Create fish
```

Done

```
c:\>Create fowl
```

Done

```
c:\>Run fish, fowl
```

And God created the great sea monsters and every living creature that creepeth wherewith the waters swarmed after its kind and every winged fowl after its kind. And God saw there were 0 errors.



And God logged on at 12:01:00 AM, Friday, March 6.

c:\>Create cattle

Done

c:\>Create creepy\_things

Done

c:\>Now let us make man in our image

Unspecified type. Try again.

c:\>Create man

Done

c:\>Be fruitful and multiply and replenish the earth and subdue it and have  
dominion over the fish of the sea and over the fowl of the air and over  
every  
living thing that creepeth upon the earth

Too many command operands. Try again.

c:\>Run multiplication

Execution terminated. 6 errors.

c:\>Insert breath

Done

c:\>Run multiplication

Execution terminated. 5 errors.

c:\>Move man to Garden of Eden

File Garden of Eden does not exist.

c:\>Create Garden.edn

Done

c:\>Move man to Garden.edn

Done

c:\>Run multiplication

Execution terminated. 4 errors.

c:\>Copy woman from man

Done

c:\>Run multiplication

Execution terminated. 2 errors.

c:\>Create desire

Done

c:\>Run multiplication

And God saw man and woman being fruitful and multiplying in Garden.edn

Warning: No time limit on this run. 1 errors.

c:\>Create freewill

Done

c:\>Run freewill

And God saw man and woman being fruitful and multiplying in Garden.edn

Warning: No time limit on this run. 1 errors.

c:\>Undo desire

Desire cannot be undone once freewill is created.

c:\>Destroy freewill

Freewill is an inaccessible file and cannot be destroyed.

Enter replacement, cancel, or ask for help.

c:\>Help

Desire cannot be undone once freewill is created.

Freewill is an inaccessible file and cannot be destroyed.

Enter replacement, cancel, or ask for help.

c:\>Create tree\_of\_knowledge

And God saw man and woman being fruitful and multiplying in Garden.edn

Warning: No time limit on this run. 1 errors.

c:\>Create good, evil

Done

c:\>Activate evil

And God saw he had created shame.

Warning system error in sector E95. Man and woman not in Garden.edn. 1 errors.

c:\>Scan Garden.edn for man, woman

Search failed.

c:\>Delete shame

Shame cannot be deleted once evil has been activated.

c:\>Destroy freewill

Freewill is an inaccessible file and cannot be destroyed.  
Enter replacement, cancel, or ask for help.

c:\>Stop

Unrecognizable command. Try again

c:\>Break

c:\>Break

c:\>Break

ATTENTION ALL USERS \*\*\* ATTENTION ALL USERS: COMPUTER GOING  
DOWN OR REGULAR DAY OF MAINTENANCE AND REST IN FIVE  
MINUTES. PLEASE LOG OFF.

c:\>Create new world

You have exceeded your allocated file space. You must destroy old files before new ones can be created.

c:\>Destroy earth

Destroy earth: Please confirm.

c:\>Destroy earth confirmed

COMPUTER DOWN \*\*\* COMPUTER DOWN. SERVICES WILL RESUME  
SUNDAY, MARCH 8 AT 6:00 AM. YOU MUST SIGN OFF NOW.

And God logged off at 11:59:59 PM, Friday, March 6.

12:00:01 AM, Sunday, March 8 God created Macintosh

END

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From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: FAITHD@dnr.state.wi.us (Don C. Faith III, AM/7, \((608\) 267-3135)  
Subject: [18803] Dan's Cent. 75m SSB -muddy sig. (long)  
Message-ID: <009B3A5C48D8886F.94FC@dnr.state.wi.us>

I think I have got the 'muddy' signal problem taken care off:  
Either I was overdriving or the mike feed capacitance was too large.  
Although I did not calculate the cutoff freq. obtained by using a 0.1 vs.  
a 0.22 uF, (I don't know the modulator input inpedance- see comment re:  
my last posting); What would the input impedance be for a NE612 used as  
a balanced mixer?

I do know that the above change will increase the cutoff by a factor of 2.2.  
Thus if the 0.22 had a 200 hz cutoff (as an example), the 0.1 will have about  
a 440 hz cutoff. Also, since the nominal design value was 0.1 (and  
0.22 was an alternative), this was an easy change in the right direction.

I did a test with a friend using his QRO rig (Karl, N9XVZ) last night and  
we found that I was probably overdriving the rig (said it sounded like I  
was using too much compression). Since I had the mike set up with a gain  
control it was a simple matter to reduce the input and that improved the  
audio quality substantially. Karl estimated that the difference between my  
transmitted signal (when I was "zero beat" to match his signal to his normal  
voice quality), was only about 40 hz. I did more comparisons between

the VFO in RX and TX and observed no difference there. Some commenters wondered whether the bandpass filter(s) accounted for the differences but the bandpass filter is shared by both the RX and TX sections.

I observed some drift during our QSO but I am not sure if it wasn't from Karl's rig: He had just turned his on when we started. I know that when listening to QSO's over the band, I have been able to hear them for long periods and have not needed to adjust the frequency to keep them sounding the same. Alternatively, the drift may be a product of the heating associated with transmitting (in the Centennial).

The band conditions were v. poor last night so I had a bit of a hard time hearing Karl sometimes (I think he was also running about 5W). I was at an S-9 at his location (which probably was also the noise floor). Will be interested in other builder's measurement/assessment of receive capability. Overall, I have been pleased with the receiver and have used it to listen on the band quite a bit over the last couple evenings but I don't know how "hot" it is.

Karl's overall comment was "I think you have a winner there Don."

At this point, I feel it is a well spent \$74 and by assembling a mike using components (and an old RS mike housing), \$16 for a Tentec case and about \$10 for the mike components and connectors, I have managed to build this for about \$100. If you need to buy a mike, the cost rises to about \$120 or more. I am not sure but it may be possible to use the mike from your old RS (or other) CB. I chose to use a 5 pin DIN conn. so I could use a RS mike. RS also sells the 4 pin mike connectors if you have a cobra type mike.

Hope to hear from some of the other 'centennial' people out there with their experiences and observations. Particularly looking for info w/ regard to output power (and getting it to 5W or 8W). It is my understanding that QRP for SSB would be 10W or less.

73 (es 72) de N9WR, Don C. Faith

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>  
Subject: [18800] DAYTON 2m/440 QRP frequencies for the flea mkt!  
Message-ID: <Pine.3.89.9705020721.A24135-0100000@w3eax.umd.edu>

It occurs to me that nobody has recommended a "rendezvous" frequency, of sorts, for QRPers to spread "worthwhile information" at the Hamvention.

Let's say someone comes across a supply of Minilab TUF-1s for free, but they only have the ability to carry away 200 because they can't physically carry more than that.

The following frequencies can be used for QRPers to liaison. And after all, you'd be hard-pressed to find an HT that's not ALSO a QRP rig...as most max out at 5 watts FM!

for 2m, 147.525 and CTCSS of 110.9 if it gets noisy.  
for 70cm, 446.72 and CTCSS of 131.9 if necessary.

These were suggested by KB8USZ, Bill, who will also be in attendance.

Commit these to memory. Anybody at the flea wish to set up a crossband repeater (and ID the 440 xmit side every 10 minutes)???

\* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 \*  
\*\*\* 6m 75 grids worked on 8 watts \*\*\* HF 140 cfmd \* QRP-L #147 \*\*\*  
\*\* QRP ARCI #9054 \*\* DXCC/WAS/WAC \*\*\* 100% dipole powered HF/6m \*\*  
\* 301-549-1022 h / 301-982-1015 w \*\*\* 145.490- 147.225+ PL 156.7 \*

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Scott Bauer <ke3nv@erols.com>  
Subject: [18790] DX Posting 3D2RW (correction)  
Message-ID: <199705020645.CAA09686@smtp3.erols.com>

>Date: Fri, 02 May 1997 02:43:53  
>To: QRP-L  
>From: Scott Bauer <ke3nv@erols.com>  
>Subject: DX Posting 3D3RW  
>  
> 3D2RW is on now 0640z 7.008 QSL Via ZL1AMO Qth Fiji  
>  
> worked him with 3 watts to a vertical!!!  
>  
> GL !! Scott  
>

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Scott Bauer <ke3nv@erols.com>  
Subject: [18789] DX Posting 3D3RW  
Message-ID: <199705020643.CAA09666@smtp3.erols.com>

3D2RW is on now 0640z 7.008 QSL Via ZL1AMO Qth Fiji

worked him with 3 watts to a vertical!!!

GL !! Scott

72&73 de Scott Bauer W3CV, Odenton, MD. grid FM19. Formerly KE3NV  
Fists 1502 QRP Nut SWL Truck Pilot ARRL  
Current QRP rigs: Green MTN 15 & 17, HW-8, G-QRP GQ-40  
S&S Eng ARK-20, ARK-30, ARK-40, TAC1-80. Emtech NW-8030  
49er 38 special at 300mw  
visit my web page at <http://www.erols.com/ke3nv/>

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: randy\_ott@juno.com (Charles R Ott)  
Subject: [18827] Free 80M crystals to a good home  
Message-ID: <19970502.144849.13598.1.randy\_ott@juno.com>

I have in my possession several hundred 3.384 MHz. crystals that I am willing to pass along to anyone who needs them. Some are made by M-Tron and the others are NDK. Should work fine in that Pixie (I, II, III, etc) that you have been wanting to build or any other transmitter of direct conversion transceiver. Just looking at them on the network analyzer, they seem to 'pull' pretty well. (~ 1 KHz. without any added inductance) This means implementing T/R offset should work well.

Here's a short list of specs:

Frequency: 3.6864 MHz.  
Mode: Parallel (Looks like ~18 pF. load)  
Case: HC-49/U (You know, small metal can, wire leads)

The catch:

Must be used for QRP only.  
Must be used for good, never evil.

If you need some, let me know or send an S.A.S.E. or postage and I will send them to you. If you have a club or group that needs several, just ask. If you want to try your hand at building a crystal filter, you'll need several so you can match them.

Send requests to:

Randy Ott  
710 Wren Avenue  
Duncanville, TX 75116

Or Email questions to:

randy\_ott@juno.com

-----  
Charles R. (Randy) Ott  
K5HJ - QRP-L #1040  
-----

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: timcook@erinet.com  
Subject: [18765] FS/TRADE: AEA Morsematic keyer  
Message-ID: <33692A0C.7A5F@erinet.com>

AEA Morsematic Memory Keyer/ Trainer/Beacon for sale or trade on QRP gear. Keyer has keypad on top to program it. Comes with copy of manual and wall power supply. Asking \$95 shipped, or consider trades on QRP gear, especially 30m transceiver. please email for more info.

thanks

Tim

NZ8J

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: ed.welch@cheaha.com (ED WELCH)  
Subject: [18812] Hamsticks.....actual power output?????  
Message-ID: <8D71176.0004002A54.uuout@cheaha.com>

-> >From: Brad Mugleston <bmug@gwl.com>

-> >From Dave NOUVR - "Worldradio" had a review in the July 1995 issue.

-> >They measured the output on various mobile antennas - the spread

-> wasn't >too great between the best (a homebrew) and the worst the

-> Hamstick.

Cecil Moore said....

-> Hi Brad, I wouldn't say "the spread wasn't too great" between the



-> homebrewed bugcatcher at 59.2 dB and the hamstick at 47.5 dB. Every  
-> 3dB is losing half your power. That means the hamstick radiated 93%  
-> less power than the bugcatcher for the same power input. If the  
-> bugcatcher was radiating 100 watts, the hamstick only radiated 7  
-> watts of RF and 93 watts of heat. A hamstick is barely better than a  
-> dummy load.

I'm curious about the hamstick. For QRPTTF I used a hamstick at about 4 feet with four 34' radials angling down for about 4' and then laying on the ground. The rig was a Norcal 40a running at 1.5 watts. Of the few contacts I made I made one with MA and one with TX. I'm wondering what my actual output was coming out of the hamstick. Anybody got an idea??

How about a "Spider"....how would it compare to a hamstick???

Tnx.

72/73

Ed Welch KF4KRV

NorCal Member #???

1st Grand Poobah ScQRPion of Alabama

QRP-L #873 - FISTS #2964

Luverne, Alabama

Crenshaw County - Grid EM61

```

+-----+
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+
```

> Isn't "time" a 4-letter word? <

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997

From: "Claton Cadmus" <aplitech@Spacestar.Net>

Subject: [18783] Help MPF-131

Message-ID: <199705020359.WAA26153@Spacestar.Net>

Sometime back Chuck Adams offered up a good deal on some house numbered dual gate mosfets equivalent to MPF131. Would someone that was smart enough to save the message with the specs. and pin-out please email me a copy?

Thanks and 73 de KA0GKC Claton Cadmus

E-mail cla@spacestar.net

If you live in Minnesota check out this webpage!

<http://www.spacestar.net/users/aplitech/mnqrp/>

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: launerb@crl.com (William H. Launer)  
Subject: [18826] Interim WIMPS Report  
Message-ID: <v01530500af8fb9a77d47@[192.0.2.1]>

QRP-L'rs,

My 30M operation has been casual, most contacts were "rag-chew" type qso's, lasting more than a few minutes. I've not had a bad report on the N38S signal.

Here are the results (so far), using my 5W N38S (11 qsos, 9 states, 1 province):

Date	Starting Time (UTC)	Call	His RST	My RST	Freq	Ending Time (UTC)	QTH	Name
4/2/97	0243	W0HMD	559	549	10.123	0302	MO	LEN
4/3/97	0200	AA1MY	559	339	10.120	0216	CT	SEAB
4/4/97	0155	WZ2T	559	559	10.118	0158	NY	RICK
4/5/97	1623	W0AAU	559	539	10.120	1635	MN	HY
4/5/97	2008	WQ4RP	439	449	10.110	2013	NC	PAUL
4/15/97	0238	VE6ZAA	599	529	10.120	0309	ONT	JOHN
4/20/97	1928	KE1ED	559	439	10.120	1942	NH	BOB
4/22/97	0104	K0RDW	569	579	10.120	0116	MN	RON
4/29/97	0130	N4LRA	579	559	10.120	0155	VA	BILL
5/1/97	0110	WA0FGV	579	559	10.120	0124	SD	JIGGS
5/2/97	0257	N9PV/M	449	449	10.124	0320	NM	HOWARD

Prior to now I've had no experience with 30M, and I'm finding it an interesting band. Under the current conditions, it appears to be quite consistant, day in and day out, with less qrn than 40M and it doesn't die as quickly as 20M.

Get those 38 Specials on the air; call cq even if the band seems "dead", the band just might surprise you.

72/73 Bill wb0cld

Bill Launer  
St. Charles, MO  
launerb@crl.com  
wb0cld@wb0cld.ampr.org [44.46.66.25]  
qrp-1 #279            qrp arci #3551  
Grid Square EM48RT

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "John Kirk, VE6XT" <jakirk@freenet.calgary.ab.ca>  
Subject: [18769] IRF 9630  
Message-ID: <Pine.A32.3.93.970501175340.4414A-100000@srv1.freenet.calgary.ab.ca>

Hi:

Yes, the IRF9630 would almost certainly work in any of the projects floating around for the IRF511 etc. The only drawback is that they are P channel, so all polarized components would have to be reversed, including the power supply. In most practical applications, this almost always means positive ground (earth to you Brits) as well. Sorting out the ground loops in a nearly 100% negative ground station would make my head hurt, so I'd gladly pay the extra 80 cents for the N channel version of the same FET. Besides, my tenuous grasp of electronic circuitry is predicated on:

- "up" on the schematic is more positive
- gozintas on the left, gozoutas on the right

Dealing with positive earth, then, requires me to stand on my head, a pose I cannot honestly say has produced my best thinking.

John

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>  
Subject: [18820] LDG Autotuner, group purchase continues  
Message-ID: <Pine.3.89.9705021507.B25938-0100000@w3eax.umd.edu>

Apparently over the first two purchases, we got most of the folks who wanted 'em.

The AT-11 tunes 1.8-30 MHz at up to 150 watts.

The QRP tunes the same range but works from 100 mW to 10 watts.

Single, unbalanced coaxial output. Fast and efficient.

For more info: <http://www.radix.net/~ldg> or e-mail [ldg@radix.net](mailto:ldg@radix.net)

#### Prices

AT-11 kit normally \$150, here \$127.50

Case for AT-11 \$30.00

AT-11 factory assembled Normally \$220, here \$190;

QRP kit normally \$100, here \$85

Case for QRP \$25.00

QRP factory assembled Normally \$159, here \$139

Add shipping to all prices (\$9 to anywhere in US)

Can deliver to Dayton.

Group purchase closes May 4th (Sunday) at midnight, Pacific time.

Payment by money order ONLY.

If interested, send money order to

Scott Rosenfeld NF3I  
4015 Sparrow House Lane  
Burtonsville, MD 20866-1333

Can deliver to Dayton as well (save on shipping)!

\* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 \*  
\*\*\* 6m 75 grids worked on 8 watts \*\*\* HF 140 cfmd \* QRP-L #147 \*\*\*  
\*\* QRP ARCI #9054 \*\* DXCC/WAS/WAC \*\*\* 100% dipole powered HF/6m \*\*  
\* 301-549-1022 h / 301-982-1015 w \*\*\* 145.490- 147.225+ PL 156.7 \*

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997

From: Scott Rosenfeld NF3I <[ham@w3eax.umd.edu](mailto:ham@w3eax.umd.edu)>

Subject: [18828] Long list of stuff (shrinking) for sale

Message-ID: <Pine.3.89.9705021525.C25938-01000000@w3eax.umd.edu>

Standard C5718DA twin band high power mobile (50w 2m,=20  
40w 440). All of the guts (display, etc) is in the=20  
mic making it an ideal mobile rig. Dual in-band  
receive, crossband repeat, six scanning modes,=20

20 memories per side, speaker IN the mic, etc., etc.  
I looked for one, and ended up with two  
Excellent shape. The rubber on the mic is slightly=20  
rubbed off; this is normal, and the factory is working  
on fixing the problem...  
Unit functions perfectly, have box, manual, power cord,=20  
etc. \$700 new, asking \$525 firm. Great for hidden  
mobile setups (i.e. small cars) like mine (shhh).

Ark 20 20m CW rig. Exc. cond., with keyer installed=20  
by S&S. Comes with FREE Ramsey 20w linear amp. =20  
Manuals, box, etc. \$275.

Heathkit HM-2140 dual peak/PEP wattmeter,=20  
2 kW, exc. cond., \$90 w/manual.

Heathkit HM-102 HF wattmeter, exc. cond.,=20  
remote sensor, \$40.

A YELLOW VHF/UHF Scanner! Uniden=20  
Bearcat Sportcat SC-150Y, and yes, it=92s YELLOW. =20  
Exc. cond. with charger, NiCd pack, and rubber duck=20  
antenna. NO CELL COVERAGE but covers approx.=20  
30-54, 136-174, 400-512, and 800-960 MHz.. \$135.

Radio Shack HTX-202 2m handheld, exc. cond. with NiCd,=20  
Alkaline case, charger, manual, and duckie \$135.

Alinco DR-130T 2m 50 watt mobile rig. CTCSS=20  
encode, backlit LCD display, 20 memories, very=20  
compact. Box, manual, DTMF mic, mobile bracket,=20  
power cord. \$200.

Alinco DR-1200T 2m mobile xcvr with DTMF mic. =20  
Exc. cond., comes with manual, NO mobile bracket. =20  
CTCSS encode/decode, used mobile 2 years, traveled=20  
all over the country without a hitch. 25 watt output,  
modified for wide-band receive and xmit. \$175.

Archer Radio Shack Video selector switch. 15-1261. Two AUX=20  
above. Like new, \$15. I never used this (it's KA3RTE's).

Yaesu NC-50 dual-slot charger with CA-14=20  
charging cups for FT-10/40/50 handhelds. In box,=20  
new condition, used maybe twice. \$135 new, asking \$90.

Sirio HP-2070 dual-band (2m/440) antenna, with UHF=20  
coupler (needs mount). Similar in size/performance=20

to Diamond SG-7500. \$60 new, used once, asking \$45.

\* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 \*  
\*\*\* 6m 75 grids worked on 8 watts \*\*\* HF 140 cfmd \* QRP-L #147 \*\*\*  
\*\* QRP ARCI #9054 \*\* DXCC/WAS/WAC \*\*\* 100% dipole powered HF/6m \*\*  
\* 301-549-1022 h / 301-982-1015 w \*\*\* 145.490- 147.225+ PL 156.7 \*

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)  
Subject: [18776] low impedance parallel line?  
Message-ID: <9705020136.AA03211@krypton.nmr.Hawaii.Edu>

Lacking an easy source of low impedance parallel line, I was wondering what would happen if you glued two or more runs of good TV twin lead together, wired them in parallel and used them as balanced line?

Would two runs of 300 ohm twin lead hooked in parallel be equivalent to two inductances in parallel? or just a 300 ohm line with a higher current rating but still 300 ohms?

I also anxiously await any authoritative evidence that twin runs of coax hooked as balanced line are high loss, similar to twice the loss of one run of coax. I am currently using this because of the way the line runs to my restricted space antenna and the difficulty of floating regular balanced line clear of grounded and conductive surfaces. The shielded version with the coax seems very well behaved, but I have no way of measuring the losses vs just a run of high quality foam 300 ohm twin lead. I wonder if it is worth the trouble to "float" the twin lead on little supports to keep it off the grounded concrete of the lanai deck and go back to the twin lead feed.

Since the antenna is essentially "random" length rather high SWR exists on the line except on 30 meters.

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Randy Hargenrader <randyh@harksystems.com>  
Subject: [18806] Mizuho 15mtr xcvr  
Message-ID: <3369F074.4AF5@harksystems.com>

Hi gang,  
I VHF ham type that works with me heard me talking about the

Mizuho rigs and brought one to work that he "found" in a box of junk at a hamfest. Got it for next to nothing! AAARGGHH! The good news is that he lent it (ha!!!) to me since he cant use it and it needs to be fixed. (no xmtr) Looking it over, it appears to be a vfo version with two "bands" of 50kHz each (0-50/50-100). But are each individually adjustable or what? He has no documentation for it. Any help out there?

--

73, (Sir)Randy WJ4P  
Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: tedk4mkx@nmaa.org (Edward Beach)  
Subject: [18815] Multi-band wire antenna  
Message-ID: <336A32EE.2FE7@nmaa.org>

This is a multi-part message in MIME format.

-----51F15AE7982  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

The enclosed is from a friend of mine who has some rather interesting thoughts on multi-band antenna design. I have not yet tried out his ideas, but will certainly do so. If you find this material interesting, you might let the author hear from you. He is not presently on qrp-l but may be reading the digests.

72,73 de Ted - K4MKX

-----51F15AE7982  
Content-Type: text/plain; charset=us-ascii; name="BLU\_ANT.TXT"  
Content-Transfer-Encoding: 7bit  
Content-Disposition: inline; filename="BLU\_ANT.TXT"

Wire Antenna Design for You and Me...

Bill White W3ERG

Some of what I say here you can take to the bank; some is perhaps only my opinion. Hopefully I will be able to say which is which. Also, allow me to use the term "tuner" when I mean matching network. It's just a lot easier to type!

Let us arrange wire antenna systems into a REASONABLY non-controversial hierarchy from a loss standpoint (best first):

1. Center-fed (for balance) with open-wire line all the way, no tuner; a ferrite-sleeve choke-balun on a short length of coax to the rig.
2. Center-fed with open-wire line partway, then coax; again no tuner; no balun or choke.
3. Same as 2, but with balun or choke.
4. Center-fed with coax only; no tuner -- choke may be necessary.
5. Tuner used with 1.
6. Tuner used with 2.
7. Tuner used with 3.
8. Tuner used with 4.
9. All others.

IMHO, figure about half a db loss per category down through #4; add another half db if a tuner is used. This is with quality everywhere; it can be worse.

It has been pointed out many times that ideally the antenna/feedline system should be arranged such that looking into the transmission line from the transceiver output (or from the output of the antenna matching network if one is used) one sees a low-impedance (current max) rather than a high-impedance (voltage max). The main reason is to minimize problems in the shack with RF feedback and RFI.

It is easy to design a system for a single frequency in a single band to do this, but most of us like a little more capability than that! Of course, you can always operate over a certain range of frequencies nearby; just how much is determined by the "Q" of the system and by what max allowable SWR your rig will tolerate. Multi-band operation is a whole 'nother ballgame; multi-band operation without a tuner is the World Series. To illustrate how easy it is to fall into one of the "lower" categories of the above list, the configuration I am using right now is in category 7. The popular G5RV also is a category 7 antenna. I'm going to show you a multi-band Category 1 or 2 antenna.

Let's talk about that multi-band operation. Forget baluns and chokes and tuners for the moment; the goal is now to approach that current-max



condition on several bands.

One of the simplest multi-band antennas is one that was often recommended to Novices some years back; a half-wave on 7 MHz operating on its third harmonic on 21 MHz. I mention this only to show that this is the "normal" situation; an antenna repeats (sortof) its input impedance on ODD harmonics. If you want to operate on adjacent bands (still without a tuner) you have a problem, because this usually means EVEN harmonics are involved.

Suppose we really want to operate on, say, 80 and 40 meters with low losses. As we have probably all experienced, trying to make an 80-meter halfwave dipole work on 40 meters requires a tuner, and even then is sometimes difficult. A G5RV is easier, but lossy, and still requires a tuner (if it doesn't, your so-called "transformer" is so lossy that it's making your coax flat; bad news).

Let's see if we can state what a multiband goal could be...

We want to design an antenna/feedline SYSTEM which will do the best it can on as many bands as possible without a tuner; if we have to use a tuner later, we will; but let's see how far we get without one. We also would like to make as much of the feeder be open-wire line as possible, again to minimize losses.

Ideally, we would like to see an impedance which is purely resistive and lying between, say, 33 ohms and 75 ohms somewhere inside as many bands as possible. Consider the limiting cases (both impractical as systems):

- (a) An open-wire line an odd number of quarter-waves long, zero length flattop --  $Z$  is extremely low, approaching zero.
- (b) Zero-length feeder line, with flattop an odd number ( $n$ ) of halfwaves.  $Z$  is moderate, about 70 ohms resistive -- higher if  $n \geq 3$ .

We want to pick a flattop and feedline such that we get close to a current minimum at the rig end ON ALL BANDS. This means half the flattop plus the feeder length must equal an odd number of quarter-waves on all bands of interest. This is impossible, but we can come close.

We want to avoid all even numbers of quarter-waves; i.e., we must be closer to the odd point than to the even point. There are 3/12 ths wave between an odd and an even; if we shoot for no further away than 1/12 th wave from an odd quarter-wave, we should be OK -- we will be at least 2/12 ths (twice as far) away from the unwanted high- $Z$  point.

A good place to start is with a flattop somewhere around 2/3 to 3/4 wave at the main design frequency. Theoretically, a flattop exactly 2/3 wave long with a 1/3 wave feeder has some nice properties; but in practice

optimum results occur at slightly greater lengths. It is easy to get better results than the G5RV. Varney's antenna shows as a good design only for 20 meters.

You might find it fun to play around with your favorite bands and see what you could come up with. I have done this for three designs:

- (1) A super design for 40, 20, 17, 12, and 10 meters; not bad on 80.
- (2) A design for 30 and 15 meters; requires tuner.
- (3) A design for 160, 80, and 40; tuner on 160.

Design (1) I call the Blue Ridge Special; I used it several years ago at another QTH; I will be using it again later in the sunspot cycle; right now I am using Design (3) because of wanting 160.

Let me show you Design (1).

The "Blue Ridge Special":

Full flattop = 93 feet 2 inches, center-fed.

Length of 450-ohm window line = 39.5 feet ( $v/c = 0.895$ , measured).

Length of 50-ohm coax = anything convenient.

Tolerance on flattop and feeder = plus or minus 2 inches on each.

Freq in Mhz	Z-apex	Z-into 450	VSWR
3.574	26.6- j 565	10.32 + j0	4.85 (tuner on this band)
7.2641	234 + j 832	50.48 + j0	1.01
14.16455	112 - j 488	50.50 + j0	1.01
18.14855	360 + j 988	56.67 + j0	1.13
24.96483	130 - j 387	73.20 + j0	1.46
29.04803	518 + j1202	55.55 + j0	1.11

We have here (at least for all bands shown except for 80 meters) a Category 2 antenna; a Category 1 if you are so lucky as to need only a couple of feet of coax to get into the shack; much better than a Category 7 G5RV, IMHO.

These are theoretical results calculated for free-space conditions; results agreed very well with computed VSWRs when antenna was horizontal at 40 feet. Drooping will change it. Your mileage may vary, but try it!

Very little (if any) tweaking is required; I recommend the following: If you try the Blue Ridge Special, cut the feeder to 39.5 feet, the flattop to 94 feet, and shorten the flattop length a couple inches at a time until you get a resonance (minimum VSWR) somewhere in the middle of

the 12-meter band, say about 24.940 kHz. The other bands will be OK.  
Leave the feeder alone.

If you try it, be sure and let me know what you think. 73 de Bill W3ERG

wwhite@shentel.net  
-----51F15AE7982--

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: JEVERHART@cayman.vf.mmc.com  
Subject: [18799] New Rainbow Tuner Ordering Contact  
Message-ID: <970502083532.2068257f@cayman.vf.mmc.com>

Group,

The current order-taker for Rainbow Tuners, James Bennett has requested a rest! He has processed all of the first build Rainbow orders and is now well into the second group. So now we have a new volunteer, George Heron, N2APB. As previously, we do not have a club bank account so wehn you order Rainbow Tuners please make out the checks to George Heron. Dont' be concerred witha ny orders in process James will handle them and George will process new ones.

A round of applause is due James for his tireless efforts in helping to get the Rainbow project off the ground. He was pressed into service (I "volunteered" him) with very little notice and performed an outstanding job. And now George has someone to learn from!

George's particulars are:

George Heron, N2APB  
45 Fieldstone Trail  
Sparta, NJ 07871  
e-mail: g.heron@dialogic.com

This information will be posted on the njqrp web page (by George!) very shortly.

72/73,

Joe E., N2CX

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997

From: Stanley Wilson <microres@crl.com>  
Subject: [18794] NorCal 40 Trivia  
Message-ID: <Pine.SUN.3.91.970502011209.4483A-100000@crl3.crl.com>

Some of the chatter about the QRP+, ++, etc as to serial numbers recently got me thinking. Does the NC40 series have serial numbers ? Are they in sequential series ? How many were or have be built ? Guess we should say kitted since many of us have kits on the shelf of many qrp rigs unfinished. hi

But does anyone know how many NC 40's were kitted, or the orginial NC 40 A or the present version NC 40 A/B ? I can think of many trivia questions for the NC40. i.e. Who made the 5 watt mod ? At what serial number or kit was the silk screened panel introduced.. hi

Who has the most recent NC40 on the air ? How many NC40's went To The Field Last Week End. hi

I bet you can think of other nc40 trivia questions for the next qrp meeting ?

de stan ak0b

Sorry I do not know the answers either, but bet someone on the list does.

Who will be first with the correct guess or answer

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Jeff M. Gold" <JMG@tntech.edu>  
Subject: [18801] NW8020 sold  
Message-ID: <01IIDYD4BKMA8WZL2Q@tntech.edu>

I believe that the NW8020 is sold at this point

thanks

Jeff

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Stew Whitehouse <STEW\_W@compuserve.com>  
Subject: [18797] O'scope probe source  
Message-ID: <199705020802\_MC2-15D3-C30E@compuserve.com>

Hi Folks,

Just received a Mendelson Electronics (MECI)  
catalog. Page 31 lists an oscilloscope probe kit.  
1X/10X 60Mhz Max, \$18.49. Item # 570-0025.

Web: <http://www.meci.com> Email: [meci@meci.com](mailto:meci@meci.com)

All the normal disclaimers apply

72/73, Stew ke4yh  
Dunedin, Florida

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: n0acs@juno.com (John R. Morris)  
Subject: [18766] PHOENIX CRYSTAL GROUP BUY  
Message-ID: <19970501.174200.6847.14.N0ACS@juno.com>

Hi Gang,

JUST TWO (2) DAYS LEFT TO GET YOUR ORDER IN FOR THE CRYSTAL GROUP BUY.  
OFFER ENDS SATURDAY MAY 3.

DON'T FORGET TO MAIL IN YOUR ORDER, POSTMARKED NO LATER THAN SATURDAY THE  
3rd.

Don't MISS OUT!

73  
John  
PHOENIX CRYSTALS  
1714 North Ash  
Nevada MO 64772

E-mail: [n0acs@juno.com](mailto:n0acs@juno.com)  
FAX: 1-417-667-6169  
Phone: 1-417-667-6179

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: [ed.welch@cheaha.com](mailto:ed.welch@cheaha.com) (ED WELCH)  
Subject: [18778] QRPTTF Theme Location...finger-licking-good ;)  
Message-ID: <8D70449.0004002A31.uuout@cheaha.com>

Rick Tavan stated....

-> My location for QRPTTF may have fit better into the prior theme of  
-> Sites of Historical Interest. I was in Truckee, CA near Donner lake,  
-> trail and summit, all named after the infamous Donner Party that  
-> became stranded there in the terrible winter of 1846-47, losing many  
-> lives. Legend has it that some resorted to cannibalism in a desperate  
-> attempt to survive.

\*Very\* interesting, Rick. I'd said that the occurrences that happened  
that winter long ago fits right in with wierd and unusual. It's no  
legend about the cannibalism...it's fact.<gag> Did you perhaps see the  
stumps of the trees that the party cut for fire-wood and structures?...a  
picture I saw of them shows a cowboy on horseback reaching up to almost  
touch the top of the stumps....they were cut-off at snow-level...that's  
\*deep\* snow.

Also, one of the party that survived and was found alone by himself in  
one of the shacks with "leftovers and scraps" laying around openly spoke  
of eating his companions.....people avoided him like the plague. Later  
this fellow became prosperous and created a well established  
buisness.....a cafe.(I wonder what the "blue-plate special" was?)

FWIW.<g>

72/73

Ed Welch KF4KRV

NorCal Member #???

1st Grand Poobah ScQRPion of Alabama

QRP-L #873 - FISTS #2964

Luverne, Alabama

Crenshaw County - Grid EM61

```

+-----+
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+
```

> Isn't "time" a 4-letter word? <

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997

From: Stew Whitehouse <STEW\_W@compuserve.com>

Subject: [18798] QSL Suprise

Message-ID: <199705020802\_MC2-15D3-C30C@compuserve.com>

Hi again folks,

Really pleasant suprise in yesterdays mail.

North Dakota, West Virginia, and Utah all at

the same time! These were all responses

from SASEs. South Dakota still outstanding,  
maybe today.  
I do believe that all contacts deserve a QSL  
card. Just sent about 175 cards to the USA  
Bureau - saved a pile of \$ and didn't have to  
worry about getting addresses! all you foxii  
be patient, I should have my special Fox Hunt  
cards sent out through the Bureau shortly.

72/73, Stew ke4yh  
Delightful Dunedin, Florida

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Dean Marzocca" <n2tnn@ifu.net>  
Subject: [18780] QTTF results  
Message-ID: <199705020235.WAA18301@mail.ifu.net>

QTTF 1997 Report  
=====

STATION CALL: N2TNN

GROUP: NJ-QRP Club field participation

LOCATION: Grover's Mill, NJ ... legendary site of the 1939 Orson Wells  
"War of the Worlds" broadcast (4x multiplier for field location  
w/batteries)

STATION EQUIPMENT: Homebrew = Sierra (3x multiplier for homebrew  
category)

POWER OUTPUT: 900mW (10 points/QSO for <1W power category)

ANTENNA: 700-foot horizontal delta loop pointed westward

BAND	QSOs	MULTIPLIERS	TOTAL
====	====	=====	=====
40m	9	x10 x4 x3	1080
		=====	
		GRAND TOTAL =	1080

TIME, CALL, RST, STATE  
==== =====  
2016, W8TIM, 559, MI

2018, N4ROA, 549, VA  
2022, WK8S, 559, MI  
2025, KS4X0, 569, VA  
2026, KC4WXB, 589, VA  
2034, KA5DVS, 599, VA  
2059, WA8LCZ, 319, MI  
2105, W8VFM, 579, MI  
2132, K8QR, 559, OH

Martians were definately here but very difficult to see. The results were obvious every time the SLV tipped over. A 10" spike in solid soil couldn't keep the thing up. Good for us to have the 700 foot mongo in place to catch the Q's. Thanks for a fun event!!

72/73 Dean N2TNN NJ  
n2tnn@ifu.net

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Randy Hargenrader <randyh@harksystems.com>  
Subject: [18808] Revision on Mizuho Q's  
Message-ID: <3369F1D2.6EB5@harksystems.com>

Sorry guys,  
Opened up the front of the rig and found the "channel xtals"  
so its not a vfo version. so now I gotta do the math and  
figure out the operating freq based on these xtals... More  
later...

--

73, (Sir)Randy WJ4P  
Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: flydnq7x@primenet.com (Floyd Smithberg)  
Subject: [18786] ScQRPion May Meeeting  
Message-ID: <199705020535.WAA02758@usr02.primenet.com>

May already yet! Meeting will be at the usual place.... next to HRO this  
Saturday....everyone welcome.

Lubys 1933 W. Dunlap 1030 AM MST

Lots of things to talk about and pictures to see....some you won't believe!

Man Mountain Dan's hike to the Peak with 100 pound back  
pack and 2x4x8' walking stick (antenna).

Brian's Black Widow 20M vertical's performance at QTTF

Floyd's Raised radial, 33' vertical at QTTF



Group and individual QTTF scores  
Membership Certificates & Patches  
Usual show & tell....new ATU, dummy loads, kits....bring

'em all.

Plans for FD and beyond.....

72/73 Floyd NQ7X Phoenix ScQRPion DM33UQ  
ARRL ARCI NORCAL G-QRP AARP DXCC ETC

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: rbstalker@CCGATE.HAC.COM  
Subject: [18818] SE ARIZ. HAMFEST SAT  
Message-ID: <9704028625.AA862593788@CCGATE.HAC.COM>

Cochise County Radio Club will hold it's spring hamfest  
Sat 03 May at the Cochise College parking area located  
just outside Serra Vista AZ. info: 520-364-0221 or "E"  
mail slominsk@Tron.Cochise.cc.az.us

This is not a real big event size wise but is worth attending.  
there is alyways neet things at the swap meet and the near by  
army base causes some very interesting items to show up. lot's  
of homebrewers attend this one because many small parts alyways  
are available. i have no connection with the c.a.r.a. but alyways  
attend their events. It is aprox a 75 mi drive se of Tucson

72/3 W7GVN ROD TUCSON

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Russ Carpenter <russ@natworld.com>  
Subject: [18817] Second Reminder for the May Spartan Sprint  
Message-ID: <199705022014.QAA121390@nss2.CC.Lehigh.EDU>

The May Spartan Sprint will be held on May 5 (which is our standard  
date--the first monday of the month). We'll operate on two bands--40 and  
20. DON'T WORRY IF YOUR STATION IS A BIT TUBBY. WE COMMEND THE WINNERS IN  
TWO CATEGORIES--POINTS, AND POINTS PER POUND.

If you are a newcomer to the Sprints, take a look at the introductory  
material at the end of this post.

1. Start at 9:00 PM EDT, 8:00 CDT, 7:00 MDT and 6:00 PDT.  
Finish at 11:00 PM EDT, 10:00 CDT, 9:00 MDT and 8:00 PDT.

2. The frequencies will be 7040+- KHz and 14,060+- KHz. (You may operate one or two bands--your choice.)
3. Exchange RST, SPC (state, province or country) and power output.  
>
4. If you choose to call CQ, use the format "CQ SP".
5. You can take credit for working the same station on a second band.
6. To encourage QRPers to discover that there is life outside 40 meters, we'll give double points for contacts on 20 meters.

After the contest, send Russ Carpenter, an e-mail with your total QSOs and the total weight of your station (i.e., the combined weight of the transmitter, receiver, key, keyer and battery). You may also include your comments from the soapbox. If you get that information to Russ by Tuesday night, he will include your data in the contest results, which will be published on Thursday on the ARS web site and the QRP-L. Russ' email address is russ@natworld.com.

As an alternative, you can use our new automated Spartan Sprint report at the ARS web site. Just fill in a few boxes, click the "submit" button, and you're done! You can get directly to the report page with this URL: [http://www.natworld.com/ars/events/spartan/submit\\_spartan.html](http://www.natworld.com/ars/events/spartan/submit_spartan.html). Or you can take a more leisurely (and rewarding) stroll through the ARS site by going to the home page at <http://www.natworld.com/ars>.

\*\*\*\*\*

The Spartan Sprint is based on a simple but stimulating concept. We are encouraging all of you to cobble together the kind of station you'd use in a portable environment--lightweight transceiver, keyer, key, and battery. Then put that turkey on the air, and participate in a two hour sprint.

All operators are invited to play, whether or not they are members of Adventure Radio Society. Even if you don't have lightweight equipment, your participation will be rewarding, both for you and the other participants. We'll report the score in two different formats--absolute scores, and points per pound of station weight. So you can get your kicks from running up a magnificent score, or achieving an remarkable ratio of points per pound.

<P>

ARS provides handsome certificates to the operators who achieve the top two scores in points, and points per pound.

If you're thinking about becoming a member of Adventure Radio Society,

just send Richard Fisher (our membership chairman) an e-mail expressing your interest. Richard's e-mail address is KI6SN@juno.com. Membership is free, and the organization has a great group of men and women who combine their love of ham radio with their affection for the outdoors. You don't need to be a macho person; ARS welcomes people of all ages and levels of ability.

72, Russ Carpenter, AA7QU, Contest Manager  
russ@natworld.com

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Lawrence T. Owens" <w4dec@dibbs.net>  
Subject: [18823] SLV RQ Info  
Message-ID: <336A3C08.7C37@dibbs.net>

Hi Gang,

Just received a 20 ft Black Widow fishing pole from Cabela's. There are two brass clips on the base section, probably to store fishing line. I plan to make up the original SLV for the present and then get the W6MMA coil later. I am of the opinion the two brass clips should be removed. Any one out there that has used the Black Widow and can tell me how they made out, and how they prepared the base?

Thanks to all, 72,

Larry (W4DEC)  
ARCI 8834  
QRP-L 1045  
Norcal ??? Received membership letter but no #

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Paul Harden <pharden@aoc.nrao.edu>  
Subject: [18764] Solar Storm Warning 01-02 MAY  
Message-ID: <199705012321.RAA15198@zia.aoc.nrao.edu>

The sun spewed out some nasty stuff (CME = Coronal Mass Ejection) and is causing some heavy solar winds. Minor storming in our Geomagnetic field is expected next two days, which could seriously effect the HF bands. Excerpts from the official warning follows (the caps are NOT mine!)

-Paul NA5N

-----  
:Issued: 1997 May 01 2205 UT

##

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

SDF NUMBER 121 ISSUED AT 2200Z ON 01 MAY 1997

>(Solar stuff deleted)

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT UNSETTLED TO MINOR STORM LEVELS FOR THE REST OF 01 MAY AND THE FIRST HALF OF 02 MAY AS THE CME FINISHES ITS TRANSIT BY THE EARTH. QUIET TO UNSETTLED CONDITIONS ARE EXPECTED FOR THE REMAINDER OF THE FORECAST PERIOD.

IV. PENTICTON 10.7 CM FLUX

OBSERVED 01 MAY 072

PREDICTED 02 MAY-04 MAY 073/075/076

90 DAY MEAN 01 MAY 074

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 30 APR 013/011

ESTIMATED AFR/AP 01 MAY 015/012

PREDICTED AFR/AP 02 MAY-04 MAY 015/012-010/008-008/008

VI. GEOMAGNETIC ACTIVITY PROBABILITIES 02 MAY-04 MAY

A. MIDDLE LATITUDES

ACTIVE 25/20/10

MINOR STORM 10/05/05

MAJOR-SEVERE STORM 05/01/01

B. HIGH LATITUDES

ACTIVE 25/25/15

MINOR STORM 10/05/01

MAJOR-SEVERE STORM 05/01/01

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997

From: adams@chuck.dallas.sgi.com (Chuck Adams)

Subject: [18788] SS 96 Scores

Message-ID: <199705020602.BAA00971@chuck.dallas.sgi.com>

Gang,

Congratulations to the following members of QRP-L that did well in the past CW SweepStakes in November 1996. I am just now getting around to sitting down to look through the issue and noted the results starting on page 99 of May 1997 issue of QST.

Note, a large number of the calls have changed since November, but I will use the old ones as listed in QST 'cuz I don't yet have the new calls memorized. :-) Old age and all that.....  
If I left anyone out that scored high I apologize in advance as I was using the QST listing to run through the QRP-L files.  
There were so many.

Plaque Winners: I'll have a note on this below, so be sure to read it!!

Hudson Division	Brian Keegan	KF2HC
New England Div.	Tom Cooper	WA1GUV

Finishers in the top five in their region:

Central Region	Ron Majewski	WB8RUQ
Midwest Region	Al Dawkins	K0FRP
Midwest Region	Jim Lageson	WA0RPI (now N0UR)
Midwest Region	Jack Bryant	W5TFB

And a cast of hundreds of QRPers that entered the most difficult of CW contests and made their mark in the record books. I hope that the postings egging other people on helped.

I see that Timmy, AB50U, looking back at his scores for the last three years was about to enter a slump, but after beating me at Riley NM (remember the wind stories) I gave him a hard time up to SS96 and he responded with a new high score for himself and NM QRP division. Good show Tim. Better start the exercise program now for November, 'cuz 24 hrs is tough on anyone over 21 years of age. :-) I should have hung in there for another two hours to get the 24 total but Sunday evening I felt like a rug that had been severely beaten with a tennis racquet (British spelling?). When you read the articles about contesting they are very serious about getting into physical shape. It can be just as gruelling as running a marathon or similar feat of endurance. Both physically and mentally. If it were easy everyone would be doing it.

I thought for sure that Jack, W5TFB, would be #1 in South Texas. Jack did a fantastic job and really whupped the North Texas QRP crowd. Watch for him to improve again this year and I suspect the Texas Tag Team of 'TFB and 'FO will be glad to once again show any other duo how it is done. :-) We sure loved the raspberry jam and we are looking forward to another jar or two. :-)

The next time you get a chance to sit down, turn to page 103 of May QST and look at the Q (QRP) scores in each section. It reads like

a who's who of QRP-L. You guys are great.

OK, here comes the pitch, so reach for your pocket books guys and girls. On page 101 is a list of the ARRL November Sweepstakes Plaque Winners. If you look closely, the QRP CW winners need an additional 9 sponsors. This will cost you exactly \$50 per plaque. I'll put up \$50 for the Canada winner, VE3SMA. So if 8 more of you will send email to Randall A. Thompson, K5ZD, k5zd@contesting.com and mention the QRP-L group and the fact that you are personally interesting in donating to the cause and sponsor a trophy in your name (hey, you get a note in QST) it would certainly be appreciated. Ask them how to get it done.

The two winners noted early above do not have sponsors for their plaque. Get a group together if you can't do it alone. It would help get some publicity for your QRP club if members gathered up some funds and went in as a group to sponsor through the ARRL some trophies etc. It looks like to me the ARRL IS and continues to aid the cause for QRPers despite some of the negative press some would give them. Chip in and they will respond in kind. IMHO.

Randy Rand, AA2U, sponsors every year a plaque for the Atlantic Division and we can all follow his lead and do the same, so count me in for the duration for one QRP trophy per year for the CW SS for the Canada group, unless someone feels like they just gotta have that region. I'm not territorial. ;-)

Also, if you read through the 'soapbox' section you will see that there are a lot of QRPers and their notes. I won't name names but the guy in NV that just put up a lot of aluminum made the news. He is going to make it tough on all of us come November. I see that he took first in the QRP section for his region.

-----

OK, now the funny part:

1. If you were in ND (remember the recent thread on no QRPers in ND?) and you worked one contact, you would have won the division. There was not a single solitary Q entry from ND. No wonder it is so rare!!
2. Of course, there were some other notable regions missing like KS.
3. In the soapbox section a lot of people mentioned that they needed WY. On Sunday I heard a big pileup on N7NG that I couldn't bust with a pile of aluminum and 4.5W (well probably 2.5W at the time after

checking with the bird and finding that the drive had gone down). Then I look in the WY section and find that he didn't get listed or did not submit a log. I know that he was doing over 200 Qs per hour at his burn rate at 30 wpm. If he had worked six hours at that rate he would have won the contest.

4. KR0Y at 209,508 points in the A group (and he was a few miles away from me here in Dallas) took first place. And there was a time he he called CQ at 35-40 wpm with no takers and I'm sure had he slowed to 30 or so he would have had a pileup even though he had worked 1,343 of the boys and girls. He too is a member of the NTCC (North Texas Contest Club here in Dallas).
5. I know everyone in this group likes to work on antennas with snow on the ground and the wind blowing but it is not too early to start working on your antenna system(s) now. November will be here before you know it. Let's get ready before it is too late and make 1997 a bigger and better year for the QRPers in SS. I went from 26K to 65K in one year, so why not 100K this year? We should have more sunspots and maybe 15M will open up this year. Clean sweep here I come. 78 in '97!!

Anyone got land in WY??? How about antennas? Will work for food.  
:-)

Chuck Adams K5FO CP-60 adams@sgi.com

<http://reality.sgi.com/adams/>

WIMPS: Qs=032 30m=21 17m=5 12m=0 States=19/05/00 DX=03/00/00 QSLs=005

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997

From: Ivan DeLisle <ve7dlo@mail.netshop.net>

Subject: [18784] swap + shop websites (the continuing saga..)

Message-ID: <Pine.LNX.3.95.970501211500.5071A-1000000@netshop.net>

Hi!

The mail never stops! When I first asked for gear swapping e-mail lists or websites I never thought there would be such a huge response. There seems to be a lot of knowledgable people on here. In my previous message I missed one and since then I've got another. So here's the list so far:

The USENET group rec.radio.swap

websites: [www.webcom.com/webpub/class.html](http://www.webcom.com/webpub/class.html)

[vhamfest.com/class.html](http://vhamfest.com/class.html)

webcom.com/webpub/vhamfest.html  
acube.com/hamswapshop/swap.htm  
uniqueweb.com/swap1.htm  
bro.net/barc/forsale.html  
mtechnologies.com/mthome/cqcswap.htm (this one is run by  
the Colorado QRP Club and is "Very active". I'm not sure if it's limited  
to QRP, though.)

As of now I haven't been to any of these sites (can you believe it?). I  
should have some time tomorrow to do a good check on them all.

72, Ivan VE7DL0 Grand Forks, B.C., Canada (no flooding here yet)

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Bill Acito 02-May-1997 1421 <acito@asdg.ENET.dec.com>  
Subject: [18829] WTB: Zinc Chromate Primer  
Message-ID: <9705021834.AA17250@us1rmc.bb.dec.com>

I have a TenTec 525 that I am restoring. I was able to get a  
bottom skin from TenTec, but the top will need to be repainted  
(it had been repainted once, so I'm not bothered about stripping  
it).

I have not had the greatest success painting aluminum in the  
past (re: chipping), and remember from earlier posts that the  
'keys' were a very clean surface, and something called zinc  
chromate primer.

Does anyone have a trade name for this stuff, and a possible  
national chain-store source for this stuff (I combed HQ to no  
avail). I have had good luck with epoxy enamel, or appliance  
enamel as the final coating. Anyone seen Hammerite at these  
places (HQ Home Depot, etc.).

b

. . . . . - I own my own words - . . . . .  
Bill Acito acito@asdg.enet.dec.com  
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

W1PA qrp-ne qrp-l adv-rs arci norcal amsat-na arrl-life



Mobile A0-27: 31 states, 52 grids, 4 countries from FN42

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Steven Karty" <kartys@ncr.disa.mil>  
Subject: [18811] Re: batteries  
Message-ID: <9704028625.AA862595599@ncr.disa.mil>

Author: Scott Rosenfeld NF3I <ham@w3eax.umd.edu> at smtp  
From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Cecil A Moore <Cecil\_A\_Moore@ccm.ch.intel.com>  
Subject: [18768] Re: Coax as a balanced feeder???

>From: "Steven Karty" <kartys@ncr.disa.mil>  
>Using two runs of coaxial cable as a balanced feeder will result in an  
>additional 3-dB loss.

When you use two runs of coax as a balanced feeder, the Z0 is doubled,  
and therefore, for an SWR of 1:1, for the same power level, the current  
is cut in half. Since  $I^2$  losses dominate at HF, the losses in 100 ft of  
coax carrying 2 amps will be very close to the losses in 200 ft of coax  
carrying 1 amp. Think about it.

73, Cecil, W6RCA, 00TC

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: gsurrency@juno.com (Gary L Surrency)  
Subject: [18785] Re: Confessions of a Terrain Junkie  
Message-ID: <19970501.223225.9854.0.gsurrency@juno.com>

Thanks Russ for a very enlightening posting! All that effort and research  
sure gave you the best signal I heard on 20m! You were consistantly head  
and shoulders above the other signals on the band.

It was too easy to work you in the QTTF contest, since your setup was  
performing most of the work! I'll never look at a hill in quite the same  
way now! ;-)

Have yet to tally up my scores and QSOs. I operated from near Lynx Lake  
in the beautiful Prescott National Forest. The antenna was a crude long  
wire about 250 feet long strung along some tall pines on some gently  
sloping terrain. I end-fed the antenna for convenience and used a MFJ-948  
tuner and balanced line. It loaded real easy on 40m and 20m. I don't

really think I was getting any of the "terrain effect" you mention in your posting, but next time I'm stringing wires I'll have something new to think about!

It sure is fun to escape all the EMI pollution from urban areas and enjoy a QRN free (man-made QRN, at least!) operating position. More field events like QTTF and FYBO need to be organized!

Great work and an interesting idea for future events!

vy 72,

Gary Surrency AB7MY  
QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH  
Az ScQRPions

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "James C. Owen, III" <owen@piper.eeel.nist.gov>  
Subject: [18813] RE: Hamsticks.....actual power output?????  
Message-ID: <41027.owen@piper.eeel.nist.gov>

In message Fri, 02 May 97 06:14:00 -0600,  
ed.welch@cheaha.com (ED WELCH) writes:

> I'm curious about the hamstick.  
> The rig was a Norcal 40a running at 1.5 watts. I'm wondering what  
> my actual output was coming out of the hamstick. Anybody got an idea??  
>

Knowing that a Hamstick as compaired to a dipole is down 10db or more then you had about 150 mw or maybe less getting radiated. You did ok for that power level.

> How about a "Spider"....how would it compare to a hamstick???  
>

If the Spider to which you refer is an antenna made up of 3 hamsticks or hustler's or ??? then it will be no more efficient than the antennas of which it's built.

If you have room install a dipole. You will do much better than a hamstick. If you MUST use a verticle then use the maximum length of radiating element you can get and put a loading coil at the base and tune the coil for as close to 1:1 SWR as you can get. 16 feet is a good length for unsupported and some screw together sections of surplus antenna's can be acquired from

Fair Radio for a couple \$ per section. But the easiest thing is to use tubing and screw the lower end to a 2x4. 72/73 Jim K4CGY

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>  
Subject: [18779] Re: IRF 9630  
Message-ID: <Roam.SIMCSD.2.0.4.862540303.11271.myers@bigboy>

John, VE6XT, wrote:

> Hi:  
> Yes, the IRF9630 would almost certainly work in any of the projects  
> floating around for the IRF511 etc. The only drawback is that they are P  
> channel, so all polarized components would have to be reversed, including  
> the power supply. In most practical applications, this almost always  
> means positive ground (earth to you Brits) as well. Sorting out the  
> ground loops in a nearly 100% negative ground station would make my head  
> hurt, so I'd gladly pay the extra 80 cents for the N channel version of  
> the same FET. Besides, my tenuous grasp of electronic circuitry is  
> predicated on:  
> - "up" on the schematic is more positive  
> - gozintas on the left, gozoutas on the right  
> Dealing with positive earth, then, requires me to stand on my head, a pose  
> I cannot honestly say has produced my best thinking.  
> John

P-channel FETs require much more silicon to achieve an on resistance comparable to an N-channel FET, and the part may have much higher parasitic capacitances. I don't have a data book handy, but I'd carefully check to see what the gate capacitance is of the IRF9630 - you may discover it is much greater than that of an N-channel FET with a comparable voltage and current rating. I also believe they tend to cost more, too.

Power P-MOSFETs are extremely useful for 'high-side' switching, like an electronically controlled on-off switch, but I wouldn't use them for RF. I've heard rumours of P-MOSFETs that are Ok at RF, but I've never actually seen one.

Dana K6JQ  
Dana@Source.Net

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997

From: Arjen Raateland <Arjen.Raateland@vyh.fi>  
Subject: [18791] Re: IRF 9630  
Message-ID: <33698FF1.3F4@vyh.fi>

Dana H. Myers wrote:

> Power P-MOSFETs are extremely useful for 'high-side' switching, like an  
> electronically controlled on-off switch, but I wouldn't use them

Like in an automatic protection circuit against reverse polarity  
provided the ON resistance is low enough for the application.

73, OH2ZAZ

--

Arjen Raateland  
Finnish Environment Institute  
SAS Support  
phone +358 9 4030 0457

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>  
Subject: [18792] Re: IRF 9630  
Message-ID: <Roam.SIMC.2.0.4.862557144.31533.myers@bigboy>

> Dana H. Myers wrote:

> > Power P-MOSFETs are extremely useful for 'high-side' switching, like an  
> > electronically controlled on-off switch, but I wouldn't use them

>

> Like in an automatic protection circuit against reverse polarity  
> provided the ON resistance is low enough for the application.

Really? How do you avoid the issue with the intrinsic drain-source  
diode? If the source becomes more negative than the drain, the  
diode simply conducts, providing no protection from power supply  
reversal (in a high side switch using a P-MOSFET, the source is  
connected to the input voltage and the drain to the load). N-MOSFETs  
also have that intrinsic diode, in reverse.

By the way, comparing the Motorola MTP12N05 (12A, 50V) N-MOSFET to  
the MTP12P05 (12A, 50V) P-MOSFET, I see all of the MOSFET internodal  
capacitances are about double for the P-MOSFET. Rds is .3 ohm for  
the P-FET and .2 ohm for the N-FET. As mentioned before, for FETs with  
similar DC ratings, the capacitances (and die area) are much greater,  
making it less suitable for RF use.

Dana K6JQ  
Dana@Source.Net

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Arjen Raateland <Arjen.Raateland@vyh.fi>  
Subject: [18793] Re: IRF 9630  
Message-ID: <3369A072.7B05@vyh.fi>

Dana H. Myers wrote:

>  
> > Dana H. Myers wrote:  
> > > Power P-MOSFETs are extremely useful for 'high-side' switching, like an  
> > > electronically controlled on-off switch, but I wouldn't use them  
> >  
> > Like in an automatic protection circuit against reverse polarity  
> > provided the ON resistance is low enough for the application.  
>  
> Really? How do you avoid the issue with the intrinsic drain-source  
> diode? If the source becomes more negative than the drain, the  
> diode simply conducts, providing no protection from power supply  
> reversal (in a high side switch using a P-MOSFET, the source is  
> connected to the input voltage and the drain to the load). N-MOSFETs  
> also have that intrinsic diode, in reverse.

I must admit I never tried this, but I saw, or should I say, I think I saw a protection circuit with a P-MOSFET in the G-QRP magazine SPRAT once.

What I said was more like a suggestion for a possible use for P-MOSFET's. I should have expressed more reservation or better try it out first. Perhaps this thing indeed doesn't fly.

I'll look up the circuit I (think) I saw. I have no P-MOSFET's to test whatever it was, but an N-MOSFET and positive ground should do.

--

Arjen Raateland  
Finnish Environment Institute  
SAS Support  
phone +358 9 4030 0457

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Zack Lau <zlau@arrl.org>  
Subject: [18821] Re: IRF 9630  
Message-ID: <336A294E.7C4E@arrl.org>

Dana H. Myers wrote:

>  
> > Dana H. Myers wrote:  
> > > Power P-MOSFETs are extremely useful for 'high-side' switching, like an  
> > > electronically controlled on-off switch, but I wouldn't use them  
> >  
> > Like in an automatic protection circuit against reverse polarity  
> > provided the ON resistance is low enough for the application.  
>  
> Really? How do you avoid the issue with the intrinsic drain-source  
> diode? If the source becomes more negative than the drain, the  
> diode simply conducts, providing no protection from power supply  
> reversal (in a high side switch using a P-MOSFET, the source is  
> connected to the input voltage and the drain to the load). N-MOSFETs  
> also have that intrinsic diode, in reverse.

Yes, I tried it and it doesn't work as claimed. A light bulb  
hooked up as the load lights up when you reverse polarity. :-(

Thanks for pointing this out. I tried implementing it in some  
of the newer transverters I've built, but it never really got  
tested properly, since its used with a couple of other protection  
schemes... Zack Lau W1VT

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Lau, Zack, W1VT" <zlau@arrl.org>  
Subject: [18822] Re: IRF 9630  
Message-ID: <m0wNN5m-0004ihC@mgate.arrl.org>

>Hi Zack,  
>  
>[ text about IRF 9630 as reverse polarity protect device deleted]  
>  
>> Yes, I tried it and it doesn't work as claimed. A light bulb  
>> hooked up as the load lights up when you reverse polarity. :-(  
>>  
>> Thanks for pointing this out. I tried implementing it in some  
>> of the newer transverters I've built, but it never really got  
>> tested properly, since its used with a couple of other protection  
>> schemes... Zack Lau W1VT  
>  
>Oh, I'm glad you didn't get to test it properly in a transverter, since  
>it would have certainly smoked several parts ;-)  
>

I ought to add that it IS possible to use the FET as a reverse polarity protection device by reversing the drain and source leads so that the the parasitic diode isn't a problem. See page 41 of the July 1993 QST for the proper implementation.

--Zack W1VT

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Randy Hargenrader <randyh@harksystems.com>  
Subject: [18795] Re: KL sunday nite net  
Message-ID: <3369CF61.214B@harksystems.com>

JALexan706@aol.com wrote:

>  
> What freq are you at????  
> 73  
> KB0PTE

Gee, I guess you would need to know that, huh? :)  
The "Pixie" frequency - 3.686.4 MHz.  
Sorry for leaving that out!

--

73, (Sir)Randy WJ4P  
Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: n4js@amsat.org  
Subject: [18774] RE: Logging w/Windows CE Computer  
Message-ID: <XFMail.970501172403.n4js@amsat.org>

On 01-May-97 Mark S. Adams expounded:

>Hi Gang,  
>  
>I know some of you do your portable logging with a Psion or HP100/200  
>palmtop. But has anyone tried this with a Windows CE computer? The price  
>for a new HP is steep (and it does not do windows-I think) along with the  
>CE machines. I imagine the Apple Newton is likewise quite expensive. I  
>missed out on the Psion deal at Office Max a while ago.

Having been accused of being a curmudgeon, among other things, it is not surprising I suppose, that I avoid thing with "Microsoft" and "Windows" in the





How about adding a 6 dB pad to protect the transmitter and hooking up a small lightbulb to the end of the transmission line? Then you can measure the light output to find out what works best. You could even add resistors, capacitors, and inductors to simulate the expected load presented by the antenna.--Zack Lau W1VT

> I also anxiously await any authoritative evidence that twin runs of  
> coax hooked as balanced line are high loss, similar to twice the loss  
> of one run of coax. I am currently using this because of the way the  
> line runs to my restricted space antenna and the difficulty of floating  
> regular balanced line clear of grounded and conductive surfaces. The  
> shielded version with the coax seems very well behaved, but I have no  
> way of measuring the losses vs just a run of high quality foam 300 ohm  
> twin lead. I wonder if it is worth the trouble to "float" the twin  
> lead on little supports to keep it off the grounded concrete of the  
> lanai deck and go back to the twin lead feed.

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Cecil A Moore <Cecil\_A\_Moore@ccm.ch.intel.com>  
Subject: [18770] Re: Mobile Antennas

>From: Brad Mugleston <bmug@gwl.com>  
>From Dave NOUVR - "Worldradio" had a review in the July 1995 issue.  
>They measured the output on various mobile antennas - the spread wasn't  
>too great between the best (a homebrew) and the worst the Hamstick.

Hi Brad, I wouldn't say "the spread wasn't too great" between the homebrewed bugcatcher at 59.2 dB and the hamstick at 47.5 dB. Every 3dB is losing half your power. That means the hamstick radiated 93% less power than the bugcatcher for the same power input. If the bugcatcher was radiating 100 watts, the hamstick only radiated 7 watts of RF and 93 watts of heat. A hamstick is barely better than a dummy load.

73, Cecil, W6RCA, 00TC

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Kory Hamzeh <kory@avatar.com>  
Subject: [18772] Re: Mobile Antennas  
Message-ID: <Pine.BSI.3.91.970501172140.12808B-100000@avatar.avatar.com>

Does anyone know where the Outbacker Perth falls into this spread?

On Thu, 1 May 1997, Cecil A Moore wrote:

```
> >From: Brad Mugleston <bmug@gwl.com>
> >From Dave N0UVR - "Worldradio" had a review in the July 1995 issue.
> >They measured the output on various mobile antennas - the spread wasn't
> >too great between the best (a homebrew) and the worst the Hamstick.
>
> Hi Brad, I wouldn't say "the spread wasn't too great" between the
> homebrewed bugcatcher at 59.2 dB and the hamstick at 47.5 dB. Every
> 3dB is losing half your power. That means the hamstick radiated
> 93% less power than the bugcatcher for the same power input. If
> the bugcatcher was radiating 100 watts, the hamstick only radiated
> 7 watts of RF and 93 watts of heat. A hamstick is barely better than
> a dummy load.
>
> 73, Cecil, W6RCA, OOTC
>
>
```

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Sandy W5TVW <ebjr@worldnet.att.net>  
Subject: [18782] Re: Mobile Antennas  
Message-ID: <19970502003353.AAA29385@LOCALNAME>

At 12:11 AM 5/2/97 +0000, you wrote:

```
>>From: Brad Mugleston <bmug@gwl.com>
>>From Dave N0UVR - "Worldradio" had a review in the July 1995 issue.
>>They measured the output on various mobile antennas - the spread wasn't
>>too great between the best (a homebrew) and the worst the Hamstick.
>
>Hi Brad, I wouldn't say "the spread wasn't too great" between the
>homebrewed bugcatcher at 59.2 dB and the hamstick at 47.5 dB. Every
>3dB is losing half your power. That means the hamstick radiated
>93% less power than the bugcatcher for the same power input. If
>the bugcatcher was radiating 100 watts, the hamstick only radiated
>7 watts of RF and 93 watts of heat. A hamstick is barely better than
>a dummy load.
>
>73, Cecil, W6RCA, OOTC
>
> I went thru this mobile antenna thing many years ago. The old
standard used to be the Master Mobile adjustable coil or the Vaaro coil.
Both were practically the same animal as the present day "bug catcher".
Both center-loaded. When I went mobile during the Rice-box SSB era, I tried
```

the Webster "Band Spanner". It worked pretty good. I tried the Newtronics "Hustler". It worked OK QRP, but with a 100 watt rig, it did work....but! The Hustler fell off the car (literally) on the way to a hamfest one day. I bought my first Bug Catcher loading coil. I used a 4' base mast, the coil and a 5' whip. Matching done with a shunt capacitor at the antenna base. Right away, I started getting signal reports 6-12 db better than I ever got before! This on 40 meters. Much better on 75 meters! It was like adding an amplifier to the rig! On 80 and 40 it was even better with an 8' top whip! (A 13' antenna is hell in a parking garage!)

I am sold on the "old technology"! Compared to the "bug catcher" configuration, everything else was crap!

73

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive,

Metairie, LA., 70001

ebjr@worldnet.att.net

\*\*Looking for: 860 tubes, WL-460 tubes\*\*

\*\*Butternut HF2V antenna, G-R test gear.....\*\*\*

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997

From: Randy Hargenrader <randyh@harksystems.com>

Subject: [18796] Re: Mobile Antennas

Message-ID: <3369D28C.2ADE@harksystems.com>

I own both a Hamstick and a Hustler and from a purely empirical standpoint the Hamstick is a very weak performer. The Hustlers on the other hand perform quite well. No serious study, just operational observation.

--

73, (Sir)Randy WJ4P

Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997

From: "James C. Owen, III" <owen@piper.eeel.nist.gov>

Subject: [18802] Re: Mobile Antennas

Message-ID: <33416.owen@piper.eeel.nist.gov>

In message Fri, 02 May 1997 07:39:56 -0400,  
Randy Hargenrader <randyh@harksystems.com> writes:

I own both a Hamstick and a Hustler and from  
a purely empirical standpoint the Hamstick is a very  
weak performer. The Hustlers on the other hand perform quite  
well. No serious study, just operational observation.

--

>  
> AND a number of years ago when I was HF mobile I compared the Hustler and  
> my HB Bugcatcher (base loaded, not center with 102" whip) on 75M and the  
> Bugcatcher was 6-10 db stronger.  
> Conclusion: MY opinion, go with the Bug Catcher if at all possible. One  
> can be HB'ed for about \$25.00 BUT it does require a stronger mount than  
> the smaller Ham stick. I have run it with a 3 Magnet Mag mount with no  
> problems at 70 MPH but it's hard to tune with no direct ground to the car  
> body due to the mag mount and paint. 72/73 Jim K4CGY qrp-1 #72  
>

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Ed Pacyna <pacyna@auratek.com>  
Subject: [18805] Re: R2  
Message-ID: <3.0.16.19970502094953.24e7dd48@galaxy.auratek.com>

>Tell me if I got this right.

>

>\* We don't need a power splitter from the VFO  
>as we would get the I and Q from the Flip flop,

This is correct. Using a single 74ACT74 chip which has 2 D type flip flops  
wired as a twisted ring counter (also know as a Johnson counter) will  
generate the I and Q signals for the R2 receiver. Additionally, another  
74ACT74 could be driven by the same oscillator and generate the I and Q  
signals for the companion T2 SSB transmitter (e.g. no power splitters  
needed).

>\* We won't need a phasing control (in a multi band Rx)for opposite  
>side band rejection as the Square wave I and Q are  
>real clear cut opposites for all frequencies.

The 74ACT74's count to 150MHz, so even after the divide by 4 that the  
counter does to generate the 90 degree (note: not opposites) I and Q  
signals, a LO for HF frequencies are easily attainable. Best of all, the  
schema is wide band so no additional phasing adjustments are necessary. In

other words, to cover 20M an input 56MHz is required (4 X 14), or for 10M, an input of 112MHz is needed (4 X 28) thereafter the 90 degree I / Q signals come out automatically at the operating frequency.

>\* We won't even need the matched high L and C filters!!!!

Not sure which L and C filters your referring to here. If you referring to LC phasing circuits between the VFO and mixer, then yes.

>And would take the quesswork out of coming up with correct  
>phasing.

Yes, and there are other benefits (e.g. low drift, less IMD, phase noise etc.).

I found that using 74ACT74's powered at 5V produces 17dBm (can drive high performance ring mixers). A 100 ohm series resistor dropped power down to 7dBm (i.e. SBL-1). The duty cycle is also 50% which is critical when driving switching type mixers.

DC receivers are also very prone to their own set of problems (e.g. hum, microphonics etc.). This is largely due to the LO running at the operating frequency (where the LO radiates out and is received back producing phase modulation in the mixer). Additionally when a transmitter and LO are at the same frequency, there are another set of problems (e.g. pulling, chirp etc.). So a big benefit here is that the LO is at 4X the operating frequency (neat solution to major problems).

>Do you have a homepage where you have described this or tell  
>me where I can get more info on this, I would love to build the  
>R2 using this method.

I do not have a home page. You could find information on twisted ring counters in most books on digital circuits. When I get some motivation and time I'll write an article to submit for publication.

73,  
Ed W1AAZ

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Frank G3YCC <g3ycc@gqrpclub.demon.co.uk>  
Subject: [18824] Re: SLV vs. Dipole: Signal Comparisons  
Message-ID: <862595484.056366.0@gqrpclub.demon.co.uk>

It is very hard to compare two co-sited antennas efficiently in my opinion.

You are bound to get reflections, reradiation, interaction etc - unless you have the space to install them well apart. Of course radiation from a horizontal dipole and a vertical is different anyway, there being more low angle (DX-y) from the vertical, whatever sort it is than from a dipole, as we all know. Having said all that, I live next-door-but-one to another ham, who is now virtually QRT (I'm glad to say!), but at one time, I had a three band dipole (Mosley TA31JR) at 35 feet and he had a Mosley three vertical, which he tried at ground level, with 3/4 radials for each band. the mast at 35 feet with elevated radials as before and the dipole outperformed it all the time, using the same power (I had a Swan 350 then...) including DX contacts, like into PY etc from G-land. Make of that what you will. Of course, the performance of any vertical will be very much dependent on the ground system used.

Just a few of my observations, but the SLV look to be a useful antenna, must find out how much it would cost here in UK, where everything (sigh) is more expensive than USA!

Frank G3YCC

QRP Web Site: <http://www.gqrpclub.demon.co.uk>

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "James C. Owen, III" <owen@piper.eeel.nist.gov>  
Subject: [18807] RE: SWR Bridge Help  
Message-ID: <35527.owen@piper.eeel.nist.gov>

In message Thu, 1 May 1997 10:53:56 -0700 (PDT),  
Kory Hamzeh <kory@avatar.com> writes:

>  
> I saw a schematic for an absorbing SWR bridge in the Sep 94 issue of QRPp  
> (page 64). I'd like to build this puppy, but it seems to me that this  
> design would only show the forward power and not the reflected power. If  
> you have access to that schematic, can you please look at it and tell me  
> why my thinking is wrong?  
>  
> Thanks,  
> Kory  
> AC6RN  
>

I'm afraid your thinking is wrong Kory. It's a simple bridge circuit. When the antenna or any load on the antenna terminal is 50 ohms the bridge is balanced and there is no voltage difference between the points where the inductor is connected hence no current flow and no light from the LED. When the impedance changes, up or down, at the antenna terminal the bridge is

unbalanced and a current flows through the inductor and the LED lights.  
Therefore you tune the tuner for minimum light from the LED. 72/73 Jim K4CGY

From owner-qrp-l@Lehigh.EDU Fri May 2 18:06:02 1997  
From: Kory Hamzeh <kory@avatar.com>  
Subject: [18816] RE: SWR Bridge Help  
Message-ID: <Pine.BSI.3.91.970502093959.775A-1000000@avatar.avatar.com>

Hi James,

I think your thinking of the wrong tuner, but I bet your explanation still holds. If you do have the Sep 94 QRPP, please check it to make sure. The tuner was called the "Charlie Tuner Tuner".

Thanks for the explanation,  
Kory  
AC6RN

On Fri, 2 May 1997, James C. Owen, III wrote:

> In message Thu, 1 May 1997 10:53:56 -0700 (PDT),  
> Kory Hamzeh <kory@avatar.com> writes:  
>  
> >  
> > I saw a schematic for an absorbing SWR bridge in the Sep 94 issue of QRPP  
> > (page 64). I'd like to build this puppy, but it seems to me that this  
> > dsign would only show the forward power and not the reflected power. If  
> > you have access to that schematic, can you please look at it and tell me  
> > why my thinking is wrong?  
> >  
> > Thanks,  
> > Kory  
> > AC6RN  
> >  
> I'm afraid your thinking is wrong Kory. It's a simple bridge circuit. When  
> the antenna or any load on the antenna terminal is 50 ohms the bridge is  
> balanced and there is no voltage difference between the points where the  
> inductor is connected hence no current flow and no light from the LED. When  
> the impedance changes, up or down, at the antenna terminal the bridge is  
> unbalanced and a current flows through the inductor and the LED lights.  
> Therefore you tune the tuner for minimum light from the LED. 72/73 Jim K4CGY  
>  
>

From owner-qrp-1@Lehigh.EDU Fri May 2 18:06:02 1997  
From: "Craig B. Johnson" <johns516@maroon.tc.umn.edu>  
Subject: [18773] RE: T1 38S - problems  
Message-ID: <336936806064010@mhub1.tc.umn.edu>

>I rewound T1 - making sure that the phasing was correct and set it to 19  
>turns. So far I have taken 2 turns off with very little effect and only 1  
>peak. The radio is still deaf. I can hear signals so I know the band is  
open  
>but they be way down. Experimented with different ear phones and speakers  
but  
>nothing...

>Side tone is good, had to put the 1 meg in to make it comfortable but the  
>programming tones for the tick keyer are almost inaudible. I suspect  
because  
>of that big resistor. I went through and once again checked the voltages.  
I  
>then hooked up an RF generator to the 259 and started tracing through with  
a  
>scope. The audio signal from the RF generator was really loud so the amp  
was  
>working which I varified with the scope. Watching the scope and turning  
TC1 I  
>still could only see 1 peak (thought maybe I couldn't hear the second  
peak).

>I jumpered out the RF gain pot with no change.  
>D1 and D2 seem normal and equal.

>On the transmit side everything works fine. Have the 5 watt mod installed  
and  
>people across town say it be clean so I suspect that the output filters,  
L3  
>and L4 are ok. On the bright side I don't hear any thumping :)

>With nearly 1500 kits out there I can be the only one having this problem  
and  
>yes, I have considered buying a new kit and starting over :)

>Thanks in advance...

>Wayne WB7WHI  
>Spokane, Wa.



Wayne,

Sounds very familiar; my 38-Special had similar problems. Mine went completely "deaf" when I installed the 5-watt mod. (It worked fine "stock".) My RF-gain control also had no effect.

Several suggestions from people in this group led me to a solution. I ended up fixing it by just tweaking a few components:

- 1) I changed C14 to .1 (mono) instead of .01. This was mainly to cure the thump problem. It did. What a big improvement!
- 2) I changed C26 to 330 (Silver Mica) . In addition, my C501 is 560 (SM), C28 is 1000 (SM) and C29 is 560 (SM). C101 is replaced with a jumper and R101 is not installed (open).
- 3) I replaced R24 with a short. This helped the volume a little. I am feeding it into a RS DSP unit, so volume is fine now. Works fine with headphones also.
- 4) I took one turn off T1. Now 2T : 18T. Before the 5-watt mod, 2T : 19T worked fine but, for some reason, with the 5-watt mod I only got 1 peak, so I backed off T1 by one turn and got two solid peaks again.

BTW, I made my first contact with it a couple days ago. Got a 589 from Kansas, about 600 miles away. Still not in a case; just a board on the desk, looking like an octopus. :-)

I'm sure your 38S will come alive also, Wayne. Hang in there.

73,

- Craig, AA0ZZ  
St. Paul, Minnesota